


# MASSACHUSETTS TEACHERS' RETIREMENT SYSTEM



## Annual Statement of the Financial Condition of the Massachusetts Teachers' Retirement System

To the Public Employee Retirement Administration  
Commission  
for the year ended December 31, 2010

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To the Public Employee Retirement Administration Commission  
for the year ended December 31, 2010

DATE OF FILING: APRIL 29, 2011

## THE MASSACHUSETTS TEACHERS' RETIREMENT BOARD

**Jeff Wulfson**

Chairman

Associate Commissioner of Department of Elementary and Secondary Education

**Steven Grossman**

State Treasurer

Chairman, Pension Reserves Investment Management (PRIM) Board

**Suzanne M. Bump**

State Auditor

**John A.M. Dow, Jr.**

Elected by the membership

MTRS appointed representative to the PRIM Board

Retired Massachusetts educator

**Linda M. Ruberto**

Vice Chair

Appointed by the Board

Retired Massachusetts educator

**Karen Ann Mitchell**

Elected by the membership

Active Massachusetts educator

**Ellen T. Hargraves**

Appointed by the Governor

Retired Massachusetts educator

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# MTRS Annual Statement

For the year ended December 31, 2010

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## Board Certification of Annual Statement

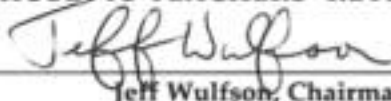
**ANNUAL STATEMENT**  
for the  
**FINANCIAL CONDITION**  
of the  
**MASSACHUSETTS TEACHERS' RETIREMENT SYSTEM**  
Organized under the Laws of the Commonwealth of Massachusetts  
to the

**COMMISSIONER OF PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION**  
**OF THE COMMONWEALTH OF MASSACHUSETTS**  
**PURSUANT TO THE LAWS THEREOF**

Massachusetts Teachers' Retirement System  
One Charles Park, Cambridge, MA 02142-1206  
Telephone: 617-679-6877

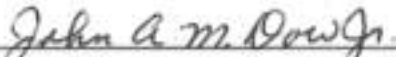
We, the undersigned members of the Teachers' Retirement System, certify under the penalties of perjury, that we are the official board members of said retirement system, and that on the thirty-first day of December last, all of the herein-described assets were the absolute property of said retirement system, free and clear from any liens or claims thereon, except as stated, and the following statements, with the schedules and explanations therein contained, annexed, or referred to, are a full and correct exhibit of all the assets, liabilities, income and disbursements, changes in fund balances and of the conditions and affairs of the said retirement system on the said thirty-first day of December last, and for the year ended on that date, according to the best of our information, knowledge and belief, respectively.

**MASSACHUSETTS TEACHERS' RETIREMENT SYSTEM**

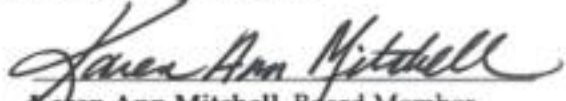


Jeff Wulfson, Chairman

Designee of Commissioner of Elementary and Secondary Education



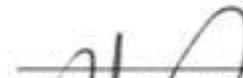
John A.M. Dow, Jr., Board Member  
Term expires 12/31/2011



Karen Ann Mitchell, Board Member  
Term expires 12/31/2011



Linda M. Ruberto, Board Member  
Term expires 1/31/2012

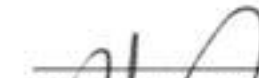


Ellen T. Hargraves, Board Member  
Term expires 4/18/2010



Nicola Favorito  
Designee of Steven Grossman

4/24/11



John W. Parsons  
Designee of Suzanne M. Bump

## Public Pension Coordinating Council Award



Public Pension Coordinating Council

### ***Recognition Award for Administration 2010***

Presented to

### ***Massachusetts Teachers Retirement System***

In recognition of meeting professional standards for  
plan administration as  
set forth in the Public Pension Standards.

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in cursive script, reading 'Alan H. Winkle'.

Alan H. Winkle  
Program Administrator

## Members of the Board



**Jeff Wulfson**  
Chairman

Associate Commissioner  
of Department of  
Elementary and  
Secondary Education



**Linda M. Ruberto**  
Vice Chair

Appointed by  
the Board

Retired  
Massachusetts  
educator



**Steven Grossman**  
State Treasurer

Chairman,  
Pension Reserves  
Investment  
Management (PRIM)  
Board



**Karen Ann Mitchell**  
Elected by  
the membership

Active  
Massachusetts  
educator



**Suzanne M. Bump**  
State Auditor



**Ellen T. Hargraves**  
Appointed by  
the Governor

Retired  
Massachusetts  
educator



**John A.M. Dow, Jr.**  
Elected by  
the membership

MTRS appointed  
representative  
to the PRIM Board

Retired  
Massachusetts  
educator

## Annual Statement Balance Tests

For the year ended December 31, 2010

2010

### ASSET BALANCE

Assets Previous Year	\$ 19,469,219,967
Income Current Year	4,016,877,880
Disbursements Current Year	2,336,360,343
<b>Assets Current Year</b>	<b>\$ 21,149,737,504</b>

### ASSET DIFFERENCE

Assets Current Year	\$ 21,149,737,504
Assets Previous Year	19,469,219,967
<b>Difference</b>	<b>\$ 1,680,517,537</b>

### INCOME DIFFERENCE

Income Current Year	\$ 4,016,877,880
Disbursements Current Year	2,336,360,343
<b>Difference</b>	<b>\$ 1,680,517,537</b>

### FUND CHANGE DIFFERENCE

Total Fund Change Credits Current Year	\$ 5,352,837,091
Total Fund Change Debits Current Year	3,672,319,554
<b>Difference</b>	<b>\$ 1,680,517,537</b>

**Annual Statement Balance Tests**

Continued

## Three-Year Comparison

	2010	2009	2008
<b>ASSET BALANCE</b>			
Assets Previous Year	\$ 19,469,219,967	\$ 17,314,051,852 *	\$ 25,318,713,892
Income Current Year	4,016,877,880	4,383,831,377	(5,903,462,907 )
Disbursements Current Year	2,336,360,343	2,228,663,262	2,104,114,341
<b>Assets Current Year</b>	<b>\$ 21,149,737,504</b>	<b>\$ 19,469,219,967</b>	<b>\$ 17,311,136,644 *</b>

**ASSET DIFFERENCE**

Assets Current Year	\$ 21,149,737,504	\$ 19,469,219,967	\$ 17,311,136,644 *
Assets Previous Year	19,469,219,967	17,314,051,852 *	25,318,713,892
<b>Difference</b>	<b>\$ 1,680,517,537</b>	<b>\$ 2,155,168,115</b>	<b>\$ (8,007,577,248 )</b>

**INCOME DIFFERENCE**

Income Current Year	\$ 4,016,877,880	\$ 4,383,831,377	\$ (5,903,468,907 )
Disbursements Current Year	2,336,360,343	2,228,663,262	2,104,114,341
<b>Difference</b>	<b>\$ 1,680,517,537</b>	<b>\$ 2,155,168,115</b>	<b>\$ (8,007,577,248 )</b>

**FUND CHANGE DIFFERENCE**

Total Fund Change			
Credits Current Year	\$ 5,352,837,091	\$ 5,645,041,628	\$ (4,754,752,545 )
Total Fund Change			
Debits Current Year	3,672,319,554	3,489,873,513	3,252,824,703
<b>Difference</b>	<b>\$ 1,680,517,537</b>	<b>\$ 2,155,168,115</b>	<b>\$ (8,007,577,248 )</b>

\* See Notes on the Financial Statements, Intangible Software Cost, page 14.



## Assets and Liabilities

		2010	2009	2008
1040	Cash	\$ 56,608,632	\$ 193,604,890	\$ 46,137,409
1198	PRIT Cash Account	15,983,580	17,922,988	29,070,558
1199	PRIT Capital Fund	21,000,336,165	19,311,587,953	17,177,957,406
1398	Accounts Receivable	65,933,866	65,249,310	55,911,350
1400	Prepaid Postage	78,608	109,762	—
1350	Prepaid Contracts	106,477	70,906	—
1900	Intangible Software Costs	10,999,460	7,868,871	2,238,840
2020	Accounts Payable	(309,284 )	(127,194,712 )	(178,919 )
	<b>Total</b>	<b>\$ 21,149,737,504</b>	<b>\$ 19,469,219,967</b>	<b>\$ 17,311,136,644</b>
3293	Annuity Savings Fund	\$ 5,163,834,249	\$ 4,928,039,833	\$ 4,688,917,206
3294	Annuity Reserve Fund	2,543,502,166	2,444,390,289	2,373,445,172
3295	Military Service Fund	336,522	319,019	290,954
3296	Pension Fund	—	—	—
3298	Expense Fund	—	—	—
3297	Pension Reserve Fund	13,442,064,567	12,096,470,826	10,248,483,312
	<b>Total</b>	<b>\$ 21,149,737,504</b>	<b>\$ 19,469,219,967</b>	<b>\$ 17,311,136,644</b>

## Statement of Funds Flow

	2009 Balance	Receipts	Inter-Fund Transfers	Disbursements	2010 Balance
Annuity Savings Fund	\$ 4,928,039,833	\$ 629,407,539	\$ (364,381,469 )	\$ 29,991,216	\$ 5,163,074,687
Annuity Reserve Fund	2,473,968,789 *	73,326,678	364,383,404	368,176,705	2,543,502,166
Pension Fund	0	843,491,771	971,575,807	1,815,067,578	0
Military Service Fund	319,019	19,438	(1,935 )	0	336,522
Expense Fund	0	123,124,844	0	123,124,844	0
Pension Reserve Fund	12,066,892,326	2,347,507,610	(971,575,807 )	0	13,442,824,128
<b>Total All Funds</b>	<b>\$ 19,469,219,967</b>	<b>\$ 4,016,877,880</b>	<b>\$ 0</b>	<b>\$ 2,336,360,343</b>	<b>\$ 21,149,737,504</b>

### Transfers

Transfer from Annuity Savings Fund to Annuity Reserve Fund on Account of Retirements	\$ 364,381,469
Transfer from Pension Reserve Fund to Pension Fund to Fund Pensions	\$ 971,575,807

### \*ANNUITY RESERVE FUND

Current Year	\$ 2,473,968,789
Previous Year	2,444,390,289
Adjustment	\$ 29,578,500

The adjustment was made to increase the fund balance due to an error in the calculation of interest.

## Receipts

		2010	2009	2008
<b>Annuity Savings Fund</b>				
4891	Members' Deductions	\$ 577,705,339	\$ 570,826,634	\$ 545,731,110
4892	Transfers from Other Systems	12,683,504	13,039,856	19,548,080
4893	Member Make-Up Payments and Redeposits	9,245,512	9,052,502	9,819,500
4900	Member Payments from Rollovers	6,403,052	5,136,403	7,321,660
4902	Early Retirement Incentive Plans	715,309	4,011,408	4,429,080
4820	Investment Income Credited to Members' Accounts	23,414,385	21,516,163	24,301,604
	<b>Subtotal</b>	<b>\$ 630,167,101</b>	<b>\$ 623,582,965</b>	<b>\$ 611,151,034</b>
<b>Annuity Reserve Fund</b>				
4820	Investment Income	73,326,678	58,302,355	58,777,549
	<b>Subtotal</b>	<b>\$ 73,326,678</b>	<b>\$ 58,302,355</b>	<b>\$ 58,777,549</b>
<b>Pension Fund</b>				
4898	3(8)(c) Reimbursements from Other Systems	12,838,684	13,307,848	8,648,710
4899	Received from Commonwealth for COLA	139,475,980	125,774,730	112,414,934
4894	Pension Fund Appropriation	691,177,107	673,557,199	699,514,760
4840	Workers' Compensation Settlement	—	244,800	—
	<b>Subtotal</b>	<b>\$ 843,491,771</b>	<b>\$ 812,884,577</b>	<b>\$ 820,578,404</b>
<b>Military Service Fund</b>				
4890	Contributions Received for Military Service	17,847	26,736	26,955
4820	Investment Income	1,591	1,329	1,549
	<b>Subtotal</b>	<b>\$ 19,438</b>	<b>\$ 28,065</b>	<b>\$ 28,504</b>
<b>Expense Fund</b>				
4820	Investment Income Credited to Expense Fund	123,124,844	\$ 137,466,261	\$ 154,617,919
	<b>Subtotal</b>	<b>\$ 123,124,844</b>	<b>\$ 137,466,261</b>	<b>\$ 154,617,919</b>
<b>Pension Reserve Fund</b>				
4897	Federal Grant Reimbursement	4,302,508	4,234,811	4,428,360
4822	Interest Not Refunded	471,957	496,302	631,914
4820	Excess Investment Income	2,341,966,288	2,746,811,491	(7,562,807,401)
4825	Section 91, Recovery Due to Excess Earnings	7,295	24,551	—
	<b>Subtotal</b>	<b>\$ 2,346,748,048</b>	<b>\$ 2,751,567,155</b>	<b>\$ (7,557,747,127)</b>
<b>TOTAL RECEIPTS</b>		<b>\$ 4,016,877,880</b>	<b>\$ 4,383,831,378</b>	<b>\$(5,912,593,717)</b>

## Disbursements

		2010	2009	2008
<b>Annuity Savings Fund</b>				
5757	Refunds to Members	\$ 26,434,060	\$ 23,982,434	\$ 26,363,190
5756	Transfers to Other Systems	3,557,156	5,762,501	6,378,510
	<b>Subtotal</b>	<b>\$ 29,991,216</b>	<b>\$ 29,744,935</b>	<b>\$ 32,741,700</b>
<b>Annuity Reserve Fund</b>				
5750	Annuities Paid	365,946,069	339,663,857	312,264,830
5759	Option B Refunds	2,230,636	2,408,783	1,136,641
	<b>Subtotal</b>	<b>\$ 368,176,705</b>	<b>\$ 342,072,640</b>	<b>\$ 313,401,471</b>
<b>Pension Fund</b>				
5751	Pensions Paid (Regular Pension Payments)	1,556,989,363	1,464,456,507	1,364,371,566
5755	3(8)(c) Reimbursements to Other Systems	118,583,740	129,148,190	126,566,750
5753	QEBA	18,495	—	—
5752	COLAs Paid	139,475,980	125,774,730	112,414,934
	<b>Subtotal</b>	<b>\$ 1,815,067,578</b>	<b>\$ 1,719,379,426</b>	<b>\$ 1,603,353,250</b>
<b>Military Service Fund</b>				
4890	Return to Municipality for Members Who Withdrew their Funds	—	—	—
	<b>Subtotal</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>
<b>Expense Fund</b>				
5119	Salaries	6,309,642	6,437,102	7,158,830
5304	Management Fees	91,951,236	102,960,350	106,786,186
5308	Legal Expenses	37,301	23,770	52,450
5311	Service Contracts	882,106	1,144,746	2,163,780
5312	Rent Paid	791,862	765,668	743,253
5320	Education and Training	11,028	4,684	—
5588	PERAC Expenses	2,865,172	3,692,207	3,348,390
5589	Administrative Expenses	346,827	385,446	749,890
5599	Furniture and Equipment	207,818	486,536	129,830
5719	Travel	17,916	11,685	59,290
5897	Federal Grants Distributed	4,302,508	4,234,811	4,428,360
5900	Reimbursement to General Fund	13,553,998	17,319,256	28,997,660
5829	Amortization Expense	1,847,430	—	—
	<b>Subtotal</b>	<b>\$ 123,124,844</b>	<b>\$ 137,466,261</b>	<b>\$ 154,617,919</b>
<b>Pension Reserve Fund</b>				
	<b>Subtotal</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>
<b>TOTAL DISBURSEMENTS</b>		<b>\$ 2,336,360,343</b>	<b>\$ 2,228,663,262</b>	<b>\$ 2,104,114,340</b>

## Investment Income

	2010	2009	2008
INVESTMENT INCOME			
Investment Income received from:			
Cash	\$ 296,764	\$ —	\$ —
Pooled or Mutual Funds	565,231,459	528,791,117	755,860,900
<b>Total Investment Income</b>	<b>\$ 565,528,223</b>	<b>528,791,117</b>	<b>755,860,900</b>
4884 Realized Gains (loss)	507,095,689	(879,081,636)	(3,725,284,280)
4886 Unrealized Gains (loss)	3,852,091,040	4,685,061,004	(4,355,685,400)
	<b>\$ 4,359,186,728</b>	<b>\$ 3,805,979,368</b>	<b>\$ (8,080,969,680)</b>
4887 Less Unrealized Losses	(2,362,881,165)	(1,370,672,887)	—
<b>Net Investment Income (loss)</b>	<b>\$ 2,561,833,786</b>	<b>\$ 2,964,097,598</b>	<b>\$ (7,325,108,780)</b>
INCOME REQUIRED			
3293 Annuity Savings Fund	23,414,385	21,516,163	24,301,604
3294 Annuity Reserve Fund	73,326,678	58,302,355	58,777,549
3295 Military Service Fund	1,591	1,329	1,549
3298 Expense Fund	123,124,844	137,466,261	154,617,919
<b>Total Income Required</b>	<b>\$ 219,867,498</b>	<b>\$ 217,286,107</b>	<b>\$ 237,698,621</b>
<b>Net Investment Income (loss)</b>	<b>\$ 2,561,833,786</b>	<b>\$ 2,964,097,598</b>	<b>\$ (7,325,108,780)</b>
<b>Less Income Required</b>	<b>219,867,498</b>	<b>217,286,107</b>	<b>237,698,621</b>
<b>Excess Income (Loss) to Pension Reserve Fund</b>	<b>\$ 2,341,966,288</b>	<b>\$ 2,746,811,491</b>	<b>\$ (7,562,807,401)</b>

## Membership Information

### Active Members

Previous Year Ending December 31, 2009	82,779
Net Change During Report Year 2010	4,258
<b>Active Membership Current Year Ending December 31, 2010</b>	<b>87,037</b>

### Inactive Members

Previous Year Ending December 31, 2009	26,169
Net Change During Report Year 2010	(4,806)
<b>Inactive Membership Current Year Ending December 31, 2010</b>	<b>21,363</b>

### Retired Members, Beneficiaries and Survivors

Previous Year Ending December 31, 2009	54,465
Net Change During Report Year 2010	1,682
<b>Retired, Beneficiary and Survivor Membership Current Year Ending December 31, 2010</b>	<b>56,147</b>

Superannuation	31,433
Minimum Pension Retirements	143
Pop-Up Retirements	648
Early Retirements	1,088
Guardians	7
RetirementPlus Retirements	19,945
Survivors	1,778
Accidental Death Retirements	21
Ordinary Disability	582
Accidental Disability	355
Termination	147

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<b>Total Membership, December 31, 2010</b>	<b>164,547</b>
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## Notes on the Financial Statements

### ■ Significant Accounting Policies

The accounting records of the System are maintained on a calendar year basis in accordance with the standards and procedures established by the Executive Director of the Public Employee Retirement Administration Commission. All investments are stated at market value at the end of the year.

#### **Annuity Savings Fund**

The Annuity Savings Fund is the fund to which all members' contributions are deposited. Members withdrawing from the System received a refund of their total accumulated contributions and a required amount of interest. Refunds to members for the report year 2010 were \$26,434,060 and transfers to other systems were \$3,557,156. The value of the Annuity Savings Fund was \$5.163 billion as of December 31, 2010.

#### **Annuity Reserve Fund**

The Annuity Reserve Fund is the fund to which a member's account is transferred upon retirement from the Annuity Savings Fund and the Special Fund for Military Service credit. The annuity portion of the retirement allowance is paid from this fund. Interest is credited monthly to this fund at the rate of 3% annually on the previous month's balance. The number of new retirees increased by 3.516% from 54,465 in 2009 to 56,147 in 2010 and an amount of \$364.38 million was transferred to the Annuity Reserve Fund. The value of the Annuity Reserve Fund was \$2.543 billion as of December 31, 2010.

#### **Pension Fund**

The Pension Fund contains the amounts appropriated by the Commonwealth of Massachusetts and investment funds liquidated from the Pension Reserve Investment Trust designated to pay the pension portion of each retirement allowance.

#### **Pension Reserve Fund**

The Pension Reserve Fund is administered by the Pension Reserves Investment Management Board (PRIM Board). The Fund contains amounts appropriated by the Commonwealth of Massachusetts for the purposes of funding future retirement benefits. Any investment income in excess of the amount required to credit the Annuity Savings Fund, Annuity Reserve Fund, Expense Fund and the Special Military Service fund is credited to the Pension Reserve Fund. On November 7, 1996 Massachusetts State Teachers' and Employees' Retirement Systems Trust (MASTERS) was merged into the Pension Reserves Investment Trust (PRIT) Fund to form a consolidated pension fund under the management of the Pension Reserves Investment Management Board. Inactive member account balances must be transferred to the Pension Reserve Fund after a period of ten years of inactivity. There were no amounts transferred from the Annuity Savings Fund for 2010.

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**■ Military Service Fund**

The Military Service Fund contains contributions and interest for members while on a military leave for service in the Armed Forces and who receive creditable service for the period of that leave. The balance in the Military Service Fund on December 31, 2010 was \$336,522. No adjustment was made to the Military Service Fund during report year 2010 as no military members retired from the system. Contributions and interest income credited to the Military Service Fund were \$17,847 and \$1,591 respectively.

**■ Expense Fund**

The Expense Fund contains amounts transferred from investment income for the purpose of administering the Teachers' Retirement System. Due to the nature of the Teachers' Retirement System's funding and payment structure, it is necessary to record any unreimbursed balances in the Accounts Receivable account. No amounts were unreimbursed as of December 31, 2010.

Management fees are amounts paid by the Pension Reserve Investment Trust for managing investments. PERAC requires these costs be accounted for in the expense fund.

Reimbursement to the general fund of \$13,553,998 in 2010 contains amounts MTRS receives for the early retirement payments and 3(8)(c) payments received by other retirement systems which are deposited into the MTRS accounts at Bank of America and then are swept by Treasury and posted to the Commonwealth's General fund. MTRS does not have spending authority on these funds.

Federal grants distributed equal federal grant received. Federal money is a pass-through from school districts to MTRS to the Commonwealth's general fund; MTRS role is administrative in that we collect, deposit and record federal funds to the Commonwealth's general fund with no spending authority.

**■ Interest-Not-Refunded**

Interest-not-refunded is interest forfeited by members upon withdrawal from the System prior to becoming fully vested. The interest forfeiture applies to members who commenced employment or after January 1, 1984. The 2010 Interest-not-refunded of \$471,957 is recorded as revenue in the Pension reserve fund.

**■ 3(8)(c)**

A 3(8)(c) reimbursement is the pension benefit reimbursement received from other Massachusetts public retirement systems for the portion of creditable service attained by retirees formerly contributing to another retirement system. The total 3(8)(c) reimbursements received in 2010 for report year 2009 is ultimately credited to the Commonwealth of Massachusetts General Fund for purpose of reducing the state's actuarial liability. The Teachers' Retirement System's 3(8)(c) from other systems during report year 2010 was \$12.838 million. The amount the Teachers' Retirement System paid to other systems out of the Pension fund was \$118.583 million.



### ■ Qualified Excess Benefit Arrangement (QEBA)

To comply with Section 415 of the Internal Revenue Code which imposes limits on benefits and annual additions that restrict retirement benefits, the MTRS has funded a QEBA account. The QEBA account will provide benefits that cannot be provided under a qualified plan due to the limits of section 415 on contributions and benefits. The balance is accounted for in cash.

The Activity in the Account:	Beginning Balance	\$ 21,882
	Less Payments	– 18,495
	Balance 12/31/10	\$ 3,387

### ■ Intangible Software Cost: New Line of Business Solution/MyTRS

#### Capital Asset Activity

Computer hardware and software is recorded at cost and is being amortized on a straightline basis over a useful life of 3 years and 7 years respectively.

	January 1, 2010	Increase	December 31, 2010
<b>Assets Being Amortized:</b>			
Computer Hardware	\$ 63,840	\$ 0	\$ 63,840
Computer Software	7,805,030	4,978,020	12,783,050
Total	\$ 7,868,870	\$ 4,978,020	\$ 12,846,890
<b>Less: Accumulated Amortization</b>			
Computer Hardware	\$ 0	\$ 21,280	\$ 21,280
Computer Software	0	1,826,150	1,826,150
	\$ 0	\$ 1,847,430	\$ 1,847,430
Net Book Value	\$ 7,868,870	\$ 3,130,590	\$ 10,999,460

In 2009, the beginning balance of the Pension Reserve Fund and the Software costs were increased by \$2,915,208 to correct the reported value of the asset. This adjustment is the reason "Assets previous year" for 2009 are \$2,915,208 higher than "Assets current year" in 2008.

### ■ Estate Receivable and Payable

When a member becomes deceased, this event creates a receivable and a payable between the retirement system and the estate. At December 31, 2010 the amount due to be received from estates is \$1,117,826 and the amount payable to estates including the deceased members' remaining annuity balance is \$599,705. Due to the uncertainty of the collection and payment MTRS records these amounts to the general ledger when collected.

### ■ Receivable

The Commonwealth appropriated \$976,491,000 for State and Boston Teachers for fiscal 2010 of which \$427,600,500 was still due to be transferred to MTRS as of December 31, 2010.

Members may purchase creditable service on an installment basis. There are approximately 774 members with a \$4,014,024 in potential receivables due for service purchases. The amounts are recorded to the ledger when collected.

## Appendix A

### Detail of Accounts Receivable and Accounts Payable

		2010 Amount	Original Date
ACCOUNTS RECEIVABLE			
4891	Member Deductions	\$ 65,933,866	Jan-March 2011
<b>Total Accounts Receivable</b>		<b>\$ 65,933,866</b>	

ACCOUNTS PAYABLE			
5755	Reimbursement to City of Boston	\$ 0	
5799	Accrued Staff Salaries	184,461	January 2011
2020	Accounts Payable	124,823	January 2011
<b>Total Accounts Payable</b>		<b>\$ 309,284</b>	

## Appendix B

## Massachusetts Pension Reserves Investment Trust Statements

**MTRS Cash Fund**

For the year ending December 31, 2010

***Pension Reserves Investment Management Board***84 State Street, Suite 250  
Boston, Massachusetts 02109Treasurer Steven Grossman, Chair  
Michael G. Trotsky, CFA, Executive Director**State Teachers Retirement System****Cash Investment**

January 01, 2010 to December 31, 2010

	Month to Date	Calendar Year to Date
Your beginning net asset value for the period was:	\$ 27,538,787.84	\$ 17,922,988.12
Your investment income for the period was:	11,409.88	167,904.81
Your total contributions for the period were:	48,155,387.57	605,224,695.15
Your total redemptions for the period were:	(112,447,699.25)	(1,388,169,581.82)
Your total exchanges for the period were:	52,725,693.51	780,837,573.29
Your state appropriations for the period were:	0.00	0.00
Your ending net asset value for the period was:	\$ 15,983,579.55	\$ 15,983,579.55

As of December 31, 2010 the net asset value of your investment in the Cash Fund was: **\$15,983,579.55**

If you have any questions regarding your statement, please contact your Senior Client Service Officer Paul Todisco (617) 946-8423


A detailed statement of your account is attached to this summary sheet.

## Appendix B

## Massachusetts Pension Reserves Investment Trust Statements

**MTRS General Allocation Account**

For the year ending December 31, 2010



**Pension Reserves Investment Management Board**

84 State Street, Suite 250  
Boston, Massachusetts 02109

Treasurer Steven Grossman, Chair  
Michael G. Trosky, CFA, Executive Director

**State Teachers Retirement System**  
General Allocation Account  
January 01, 2010 to December 31, 2010

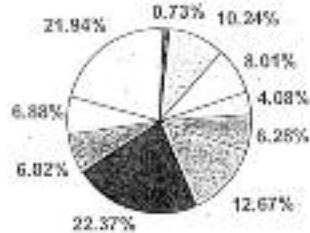
	Month to Date	Calendar Year to Date
Your beginning net asset value for the period was:	\$ 20,076,872,252.81	\$ 19,511,587,953.01
Your change in investment value for the period was:	976,189,566.08	2,469,585,785.66
Your exchanges from (to) the Cash Fund for the period were:	(\$2,725,693.51)	(780,837,573.29)
Your ending net asset value for the period was:	<u>\$ 21,000,336,165.38</u>	<u>\$ 21,000,336,165.38</u>

Net Change in Investment Value represents the net change through investment activities as follows:

Gross Investment Income:	\$ 68,010,070.50	\$ 365,231,459.03
Less Management Fees:	(20,443,384.73)	(91,951,236.42)
Net Investment Income:	<u>47,566,685.77</u>	<u>473,280,222.63</u>
Net Fund Unrealized Gains/Losses:	818,095,278.09	1,489,205,174.37
Net Fund Realized Gains/Losses:	<u>110,488,602.22</u>	<u>507,095,688.66</u>
Net Change in Investment Value as Above:	<u>\$ 976,189,566.08</u>	<u>\$ 2,469,585,785.66</u>

As of December 31, 2010 the net asset value of your investment in the PRIT Fund was: \$21,000,336,165.38

**PRIT Fund Core Asset Allocation**  
As of December 31, 2010



- ☐ Core Fixed Income
- ☐ Domestic Equity
- ☐ Emerging Markets
- ☐ Hedge Funds
- ☐ International Equity
- ☐ Port. Alpha Wind Down
- ☐ Private Equity
- ☐ Real Estate
- ☐ Timber/Natural Res.
- ☐ Value-Added Fixed Inc.

If you have any questions regarding your statement, please contact your Senior Client Service Officer: Paul Tedlow (617) 546-9625

A detailed statement of your account is attached to this summary sheet.

## Appendix C

### Supplementary Schedules

#### **Members' Balances in the Annuity Savings Account**

For the year ending December 31, 2010

Previous Balance	\$	4,928,039,833
Total Additions Current Year		606,752,716
Total Interest Current Year		23,414,385
Reductions		29,991,216
Transfer to Annuity Reserves		364,381,469
Transfer from Pension Reserve Fund		0
Transfer to Pension Reserve Fund		0
<b>Balance Current Year</b>	<b>\$</b>	<b>5,163,834,249</b>

## Appendix C

## Supplementary Schedules

**Schedule 1: Cash Account Activity During the Year**

For the year ending December 31, 2010

Type of Account, Account Number, Interest Rate	Book value at the End of the Previous Year	Total Deposits this Year	Income Reinvested/ Redeposited into Account	Withdrawals During the Year	Total Book Value 12/31 this Year	Cash Income Paid to System Not Reinvested or Redeposited	Interest due and accrued 12/31
Bank of America 005102-3319	\$ 1,083	\$ 19,882,011	\$ 0	\$ 19,883,094	\$ 0	\$ 0	\$ 0
BankNorth, N.A. 824-2111742	35,005	68,075	0	43,080	60,000	0	0
Mellon 007-6347	15,806	607,449,790	0	607,361,582	104,014	0	0
Bank Cash	\$ 51,894	\$ 627,399,876	\$ 0	\$ 627,287,756	\$ 164,014	\$ 0	\$ 0
Cash Available on MMARS	193,552,996	2,239,798,355	0	2,376,906,732	56,444,618		
Total Cash	\$193,604,890	\$2,867,198,231	\$ 0	\$3,004,194,489	\$ 56,608,632		
PRIT Cash Fund	\$ 17,922,988	\$1,387,205,647	\$ 0	\$1,389,145,056	\$ 15,983,580	\$ 0	\$ 0

## Appendix C

## Supplementary Schedules

**Schedule 5: Schedule of PRIT Funds**

For the year ending December 31, 2010

	PERAC Ledger Number 1199 PRIT Capital Fund
Market Value, End of Previous Year	\$ 19,311,587,953
Total Purchases this Year at Cost	0
Reinvested Investment Income	565,231,459
Realized Gains	524,321,110
Realized Losses	(17,225,422)
Unrealized Gains	3,852,091,040
Unrealized Losses	(2,362,881,165)
Total Sales/Redemptions this Year: Amount Received	0
Cash Dividends Distributions to System this Year	(780,837,574)
Fees Paid	(91,951,236)
Market Value at the End of this Year	21,000,336,165

## Appendix C

## Supplementary Schedules

**Schedule 6: Summary of Investments Owned**

For the year ending December 31, 2010

	PERAC Ledger Number			
	1040 Cash	1198 PRIT Cash	1199 PRIT Fund	Total
Current Market Value	\$ 56,608,634	\$ 15,983,580	\$ 21,000,336,165	\$ 21,072,928,379
Commissions Paid During Current Year	0	0	(91,951,236 )	\$ (91,951,236 )
Investment Income Received During Year	\$ 128,859	167,905	2,561,537,022	\$ 2,561,833,786



## Appendix D

**Prior Years' Statements of Funds Flow**

For the year ended December 31, 2009

	2008 Balance	Receipts	Inter-Fund Transfers	Disbursements	2009 Balance
Annuity Savings Fund	\$ 4,688,917,206	\$ 623,582,965	\$ (354,715,402)	\$ 29,744,936	\$ 4,928,039,833
Annuity Reserve Fund	2,373,445,172	58,302,355	354,715,402	342,072,640	2,444,390,289
Pension Fund	0	812,884,577	906,494,849	1,719,379,426	0
Military Service Fund	290,954	28,065	0	0	319,019
Expense Fund	0	137,466,261	0	137,466,261	0
Pension Reserve Fund	10,251,398,519*	2,751,567,155	(906,494,849)	0	12,096,470,825
<b>Total All Funds</b>	<b>\$17,314,051,851*</b>	<b>\$ 4,383,831,378</b>	<b>0</b>	<b>\$ 2,228,663,263</b>	<b>\$ 19,469,219,966</b>

\*Beginning fund balance adjustment of \$2,915,207 to correct the reported value of Intangible Software Costs.

## INTER-FUND TRANSFERS

Transfer from...	Annuity Savings Fund	Annuity Reserve	Pension Fund	Military Service Fund	Expense Fund	Pension Reserve Fund	Total
Annuity Savings Fund to Annuity Reserve Fund for 2009 Retirements	\$ (354,715,402 )	\$ 354,715,402	0	0	0	0	0
Military Service Fund to Annuity Reserve Fund for 2009 Retirements	0	0	0	0	0	0	0
Pension Reserve Fund to Pension Fund for Pension Benefits	0	0	\$ 906,494,849	0	0	\$ (906,494,849 )	0
Adjust Military to Pension Reserve Fund	0	0	0	0	0	0	0
	\$ (354,715,402 )	\$ 354,715,402	\$ 906,494,849	0	0	\$ (906,494,849 )	0

## Appendix D

**Prior Years' Statements of Funds Flow** (continued)

For the year ended December 31, 2008

	2007 Balance	Receipts	Inter-Fund Transfers	Disbursements	2008 Balance
Annuity Savings Fund	\$ 4,467,312,578	\$ 620,281,844	\$ (365,935,516 )	\$ 32,741,700	\$ 4,688,917,206
Annuity Reserve Fund	2,262,133,578	58,777,549	365,935,516	313,401,471	2,373,445,172
Pension Fund	0	820,578,404	782,774,846	1,603,353,250	0
Military Service Fund	262,450	28,504	0	0	290,954
Expense Fund	0	154,617,920	0	154,617,920	0
Pension Reserve Fund	18,589,005,286	(7,557,747,128 )	(782,774,846 )	0	10,248,483,312
<b>Total All Funds</b>	<b>\$ 25,318,713,892</b>	<b>\$ (5,903,462,907 )</b>	<b>0</b>	<b>\$ 2,104,114,341</b>	<b>\$ 17,311,136,644</b>

## INTER-FUND TRANSFERS

Transfer from...	Annuity Savings Fund	Annuity Reserve	Pension Fund	Military Service Fund	Expense Fund	Pension Reserve Fund	Total
Annuity Savings Fund to Annuity Reserve Fund for 2007 Retirements	\$ (365,935,516 )	\$ 365,935,516	0	0	0	0	0
Military Service Fund to Annuity Reserve Fund for 2007 Retirements	0	0	0	0	0	0	0
Pension Reserve Fund to Pension Fund for Pension Benefits	0	0	\$ 782,774,846	0	0	\$ (782,774,846 )	0
Adjust Military to Pension Reserve Fund	0	0	0	0	0	0	0
	\$ (365,935,516 )	\$ 365,935,516	\$ 782,774,846	0	0	\$ (782,774,846 )	0

## Appendix E

### Actuarial Valuation and Assumptions

The most recent actuarial valuation of the System was prepared by PERAC as of January 1, 2010.

The Normal Cost	\$ 640,399,000	11.62% of payroll
The Normal Cost for Employees on that Date was	\$ 536,859,000	9.74% of payroll
The Normal Cost for the Employer was	\$ 103,540,000	1.88% of payroll
The Actuarial Liability for Active Members was	\$ 14,703,294,000	
The Actuarial Liability for Retired Members was	\$ 19,035,672,000	
Total Actuarial Accrued Liability	\$ 33,738,966,000	
System Assets as of that Date	\$ 21,262,462,000	
Unfunded Actuarial Accrued Liability	\$ 12,476,504,000	

The principal actuarial assumptions used in the valuation are as follows:

<b>Investment Return</b>	8.25% per annum
<b>Rate of Salary Increase</b>	4.75 – 8% based on years of service

### Scheduling of Funding Progress

Actuarial Valuation Date	Jan 1, 2010
Actuarial Value of Assets (a)	\$ 21,262,462,000
Actuarial Accrued Liability (AAL)* (b)	\$ 33,738,966,000
Unfunded AAL (UAAL) (b-a)	\$ 12,476,504,000
Funded Ratio (a/b)	63.0%
Covered Payroll (c)	\$ 5,509,698,000
UAAL as a % of Covered Payroll ((b-a)/c)	226.4%